



UNITED STATES PATENT AND TRADEMARK OFFICE

cen

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,169	04/02/2004	Michael Bienvenu	031850/272210	2727

826 7590 04/26/2007
ALSTON & BIRD LLP
BANK OF AMERICA PLAZA
101 SOUTH TRYON STREET, SUITE 4000
CHARLOTTE, NC 28280-4000

EXAMINER

WASHBURN, DOUGLAS N

ART UNIT	PAPER NUMBER
----------	--------------

2863

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/817,169

Applicant(s)

BIENVENU ET AL.

Examiner

Douglas N. Washburn

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,9-19,25-32 and 40-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,9-15,17,25-29,31,32,40 and 42 is/are rejected.
- 7) ☒ Claim(s) 16,30 and 41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1 Applicant's arguments, see amendment, filed 7 March 2007, with respect to the rejection of claims 1, 12-15, 18, 19 and 27-29 under §102(b), claims 9, 17, 25, 31, 40 and 42 under §103(a) and objection to claims 10, 11, 16, 26, 30 and 41 have been fully considered and are persuasive. Therefore, the rejections and objections have been withdrawn. However, upon further consideration, a new grounds of rejection is made in view of newly discovered reference regarding wireless communication of measurement data.

The indicated allowability of claims 10, 11 and 26 is withdrawn in view of the newly discovered reference to a central computing system spaced apart from a computer device and a measuring device and configured to be capable of communicating data with the computer device. Rejections based on the newly cited reference follow.

Claim Rejections - 35 USC § 103

2 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 9, 12-15, 17, 18, 19, 25, 27-29, 31, 32, 40 and 42 are rejected under 35 U.S.C. 103(a) as being anticipated by Nazarian et al. (US 5,614,670) (Hereafter referred to as Nazarian) in view of Jaselskis et al. (US 5,952,561) (Hereafter referred to as Jaselskis) and further in view of He et al. (US 6,995,667) (Hereafter referred to as He).

Nazarian teaches:

Regarding claim 1, a measuring device (seismic pavement analyzer (SPA); column 6, lines 7 and 8) for selectively and directly measuring the property of the paving-related material (column 6, lines 40-44).

Regarding claim 1, a computer device (computer; column 22, line 24; figure 1, element 24) capable of executing a software program product (data acquisition software; column 28, line 31) and communicating with the measuring device (column 30, lines 22-27), the computer device being configured to direct the measuring device to measure the property of the paving-related material (column 6, lines 27 and 28) according to a parameter determined by the software program product (column 30, lines 33-34), and to receive data comprising the measured property of the paving-related material from the measuring device (column 30, lines 52-54).

Regarding claim 1, a communication element (control line; column 22, line 26; figure 1, element 34) operably engaged between the measuring device and the computer device (figure 1, element 34) so as to allow communication therebetween the communication element comprising a wireless transceiver operably engaged with each of the measuring device and the computer device, and the wireless transceivers being configured to be capable of communication therebetween, the measuring device directly measuring the property of the paving-related material in response to the direction of the computer device received via the communication element (column 22, lines 23-27) the communication element being configured to allow the computer device to be spaced apart from the measuring device (figure 1, elements 24, 34 and 40), thereby allowing the computer device to be prepared, to include the parameter and to manipulate the data, in spaced apart relation with respect to the measuring device (column 6, lines 22-26).

Regarding claim 12, the measuring device is configured to be capable of performing a plurality of functions (column 27, lines 20-30) and the software program product is configured to be capable of directing the measuring device to perform a combination of functions selected from the plurality of functions (column 28, lines 38-45).

Regarding claim 13, at least one function in the plurality of functions is configured to determine the parameter used to measure the property of the material (column 28, lines 47-55).

Regarding claim 14, the measuring device is further configured to directly measure at least one of a density (density; column 29, lines 2-6), a density-related parameter, and a moisture content of at least one of a soil, an aggregate, and an asphalt paving mix.

Regarding claim 15, the measuring device is selected from the group consisting of a nuclear density gauge, a nuclear moisture gauge, a seismic pavement analyzer (seismic pavement analyzer; column 6, lines 7 and 8), a stiffness gauge, a falling weight deflectometer, a ground penetrating radar device, a radio Frequency device, an electromagnetic device, a microwave device, a surface roughness measuring device, a pavement temperature sensor, a pavement temperature measuring device, and combinations thereof.

Regarding claim 18, preparing a computer device to execute a software program product for directing a measuring device to directly measure the property of the paving-related material, according to a parameter determined by the software program product, and to receive data comprising the measured property of the paving-related material from the measuring device (column 28, lines 34-38).

Regarding claim 18, executing the software program product (column 30, line 10 through column 32, line 5).

Regarding claim 18, communicating the executed software program product from the computer device to the measuring device (column 30, line 24-27) via a communication element operably engaged therebetween (figure 1, element 34) such that the measuring device directly measures the property of the paving-related material in response thereto (column 30, line 52-56), the communication element comprising a wireless transceiver operably engaged with each of the measuring device and the computer device, and the wireless transceivers being configured to be capable of communication therebetween, the communication element being configured to allow the computer device to be spaced apart from the measuring device (figure 1, elements 24, 34 and 40) such that the computer device can be prepared, in spaced apart relation with respect to the measuring device, to include the parameter and to manipulate the data (column 30, line 10 through column 32, line 5).

Regarding claim 19, communicating the data comprising the measured property of the paving-related material from the measuring device to the computer device via the communication element (column 30, lines 52-56).

Regarding claim 27, the measuring device is configured to be capable of performing a plurality of functions and preparing the computer device to execute the software (column 27, lines 20-30).

Regarding claim 27, preparing the computer device to execute the software program product, the software program product being capable of directing the measuring device to perform a combination of functions selected from the plurality of functions (column 31, lines 43-48) and at least one function in the plurality of functions being configured to determine the parameter used to measure the property of the material (column 31, lines 49-51).

Regarding claim 28, preparing a computer device to execute a software program product (column 28, lines 32-38) for directing a measuring device to directly measure at least one of a density (column 29, lines 2-6), a density-related parameter, and a moisture content of at least one era soil, an aggregate, and an asphalt paving mix.

Regarding claim 29, preparing a computer device to execute a software program product for directing a measuring device comprising at least one of a nuclear density gauge, a nuclear moisture gauge, a seismic pavement analyzer (column 6, lines 7 and 8), a stiffness gauge, a falling weight deflectometer, a ground penetrating radar device, a radio frequency device, an electromagnetic device, a microwave device, a surface roughness measuring device, a pavement temperature sensor, a pavement temperature measuring device, to directly measure the property of the paving-related.

Regarding claim 32, a computer device capable of executing a software program product (computer; column 22, line 23) and communicating with the measuring device, the computer device being configured to direct the measuring device to directly measure the property of the paving-related material according to a parameter determined by the software program product, and to receive data comprising the measured property o f the paving-related material from the measuring device (column 22; lines 26-28).

Regarding claim 32, a communication element operably engaged between the measuring device and the computer device so as to allow communication therebetween (control line; column 22, line 26; figure 1, element 34), the communication element comprising a wireless transceiver operably engaged with each of the measuring device and the computer device, and the wireless transceivers being configured to be capable of communication therebetween, the measuring device directly measures the property of the paving-related material in response to the direction of the computer device via the communication element (column 30, line 52-56), the communication element being configured to allow the computer device to be spaced apart from the measuring device, thereby allowing the computer device to be prepared, to include the parameter and to manipulate the data, in spaced apart relation with respect to the measuring device (figure 1, elements 24, 34 and 40).

Nazarian is silent regarding:

Regarding claim 1, the communication element comprising a wireless transceiver operably engaged with each of the measuring device and the computer device, and the wireless transceivers being configured to be capable of communication therebetween.

Regarding claim 10, a central computing system spaced apart from the computer device and the measuring device and configured to be capable of communicating the data with the computer device.

Regarding claim 11, the central computing system is configured to communicate with the computer device so as to modify the software program product.

Regarding claim 17, the computer device is further configured to associate a time and date stamp with the data when the property is measured.

Regarding claim 25, determining a location of at least one of the measuring device and the computer device with a locating device operably engaged with at least one of the measuring device and the computer device in regard to claim 25;

Regarding claim 26, communicating at least one of the data and a modification of the software program product between the computer device and a central computing system spaced apart from the computer device and the measuring device.

Regarding claim 31, associating a time and date stamp with the data when the property is measured.

Regarding claim 40, A locating device operably engaged with at least one of the measuring device, and the computer device, the locating device being configured to determine a location of the at least one of the measuring device and the computer device.

And Regarding claim 42, the computer device is further configured to associate a time and date stamp with the data while the property is measured in regard to claim 42.

Jaselskis teaches:

Regarding claim 9, a locating device operably engaged with at least one of a measuring device and a computer device, the locating device being configured to determine a location of at least one of the measuring device and the computer device (gps; column 12, lines 17-19).

Regarding claim 17, a computer device is configured to associate a time and date stamp with data when a property is measured (gps; column 12, lines 17-19).

Regarding claim 25, determining a location of at least one of a measuring device and a computer device with a locating device operably engaged with at least one of the measuring device and the computer device (gps; column 12, lines 17-19).

Regarding claim 31, a computer device is configured to associate a time and date stamp with data when a property is measured (gps; column 12, lines 17-19).

Regarding claim 40, A locating device (gps; column 12, lines 17-19) operably engaged with at least one of a measuring device and a computer device, the locating device being configured to determine a location of the at least one of the measuring device and the computer device.

And Regarding claim 42, a computer device is configured to associate a time and date stamp with data when a property is measured (gps; column 12, lines 17-19).

He teaches:

Regarding claims 1, 18 and 32, the communication element comprising a wireless transceiver operably engaged with each of the measuring device and the computer device, and the wireless transceivers being configured to be capable of communication therebetween (monitoring system 5 provides a wireless tracking and/or communication system between a remote tracking station 20 and a plurality of different nuclear gauges 10; column 6, lines 22-25; figure 2, elements 10, 14 and 20).

Regarding claim 10, a central computing system spaced apart from the computer device and the measuring device and configured to be capable of communicating the data with the computer device (The remote tracking station 20 can be located at a single tracking site or at selected ones of multiple tracking sites. The remote tracking station 20 can be connected to a regional or global computer network such as the world wide web or internet. The remote tracking station 20

Art Unit: 2863

can be an automated network of computers that monitors a plurality of different nuclear gauges 10; column 6, lines 47-53; figure 1, elements 10 and 20).

Regarding claim 11, a central computing system is configured to communicate with the computer device so as to modify the software program product (The tracking device 14 can include computer program code and circuitry 14c that allows remote activation/deactivation or adjustment of certain operational parameters of the device 10 and/or tracking system 14 as well as transfer of desired data in substantially real-time using the remote communication system 14w; column 12, lines 45-50

Claim 26 recites, in part, communicating at least one of the data and a modification of the software program product between the computer device and a central computing system spaced apart from the computer device and the measuring device (The tracking device 14 can include computer program code and circuitry 14c that allows remote activation/deactivation or adjustment of certain operational parameters of the device 10 and/or tracking system 14 as well as transfer of desired data in substantially real-time using the remote communication system 14w; column 12, lines 45-50).

Regarding claims 1, 9-15, 17-25, 27-42, it would have been obvious to one skilled in the art at the time of the instant invention to modify the teaching of Nazarian of a Seismic Pavement Analyzer with the teaching of Jaselskis of a locating device operably engaged with at least one of a measuring device and a computer device and with the further teaching of He of a wireless tracking and/or communication system between a remote tracking station 20 and a plurality of different nuclear gauges 10 because wireless mobile communication technology would have allowed communication with a plurality of nuclear gauges 10 to track their remote locations, monitor their usage/status and/or control their operation.

Regarding claims 10 and 11, it would have been obvious to one skilled in the art at the time of the instant invention to modify the teaching of Nazarian of a Seismic Pavement Analyzer with the teaching of Jaselskis of a locating device operably engaged with at least one of a measuring device and a computer device and with the further teaching of He of a central computing system spaced apart from the computer device and the measuring device and configured to be capable of communicating the data with the computer device because a central computing system spaced apart from the computer device and the measuring device and configured to be capable of communicating the data with the computer device would have allowed inspection personnel real time access to results.

Regarding claim 26, it would have been obvious to one skilled in the art at the time of the instant invention to modify the teaching Nazarian of a Seismic Pavement Analyzer with the teaching of Jaselskis of a locating device operably engaged with at least one of a measuring device and a computer device and with the further teaching of He of a tracking device can include computer program code and circuitry that allows remote activation/deactivation or adjustment of certain operational parameters of the device and/or tracking system as well as transfer of desired data in substantially real-time using the remote communication system because a tracking device that included computer program code and circuitry that allowed remote activation/deactivation or adjustment of certain operational parameters of a device and/or tracking system as well as transfer of desired data in substantially real-time using the remote communication system would have allowed inspection personnel real time access to results.

Allowable Subject Matter

3 Claims 16, 30 and 41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Claim 16 recites, in part, "the computer device is further configured to direct the data to a third party computer device without allowing the data to be modified". This feature in combination with the remaining claimed structure avoids the prior art of record.

Claim 30 recites, in part, " directing the data from the computer device to a third party computer device without allowing the data to be modified ". This feature in combination with the remaining claimed structure avoids the prior art of record.

Claim 41 recites, in part, "the computer device is further configured to direct the data to a third party computer device without allowing the data to be modified". This feature in combination with the remaining claimed structure avoids the prior art of record.

Conclusion

4 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas N. Washburn whose telephone number is (571) 272-2284. The examiner can normally be reached on Monday through Thursday 6:30 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2863

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DNW



John Barlow
Supervisory Patent Examiner
Technology Center 2800